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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Junzo Nagashima

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EXAMINER

ZIMMERMAN, JOSHUA D

ART UNIT

PAPER NUMBER

2854

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/523,699	Applicant(s) NAGASHIMA, JUNZO	
	Examiner Joshua D. Zimmerman	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernstein (US 4,641,579).

Regarding claim 1, Bernstein teaches “a method of supplying a dampening solution for an offset printing machine comprising the steps of:

detecting a viscosity of a dampening solution (column 5, lines 40-44 and 53-62),

selectively adding water (column 4, lines 24-26) and a surface active agent (column 6, lines 43-45. Applicant may refer to column 2, lines 35-39 of US 5,308,610 to Bowman et al. or column 6, lines 20-22 of US 4,136,739 to Salathiel et al. which indicate that ethylene glycol monobutyl ether is a surface active agent) to the dampening solution so as to obtain a treated dampening solution with an aimed viscosity value (column 5, lines 40-44 and 53-56),

supplying the treated dampening solution having the aimed viscosity value to the offset printing machine (column 1, lines 27-29 and column 5, lines 53-62), and

further adding a viscosity increasing agent to the treated dampening solution to increase the viscosity to the aimed viscosity value when the treated

dampening solution is increased in temperature, the temperature increase causing the viscosity to decrease below the aimed viscosity value (column 5, lines 53-62)."

Regarding claim 2, Bernstein teaches "a method of supplying dampening solution for an offset printing machine comprising the steps of:

detecting a viscosity of a dampening solution at (column 5, lines 40-44 and 53-62),

selectively adding water, (column 4, lines 24-26) a surface active agent (column 6, lines 43-45) and a viscosity increasing agent (column 5, lines 40-44) to the dampening solution so as to obtain a treated dampening solution with an aimed viscosity value of (column 5, lines 40-44 and 53-56),

supplying the dampening solution having the aimed viscosity value to the offset printing machine (column 1, lines 27-29 and column 5, lines 53-62), and

further adding a viscosity increasing agent to the treated dampening solution to increase the viscosity to the aimed viscosity value when the treated dampening solution is increased in temperature, the temperature increase causing the viscosity to decrease below the aimed viscosity value (column 5, lines 53-62)."

Regarding claim 3, Bernstein teaches "a method of supplying dampening solution for an offset printing machine comprising the steps of:

detecting a viscosity of a dampening solution at (column 5, lines 40-44 and 53-62),

Art Unit: 2854

selectively adding water (column 4, lines 24-26), an etchant (column 4, lines 24-26) and a viscosity increasing agent (column 5, lines 40-44) to the dampening solution so as to obtain a treated dampening solution with an aimed pH value and an aimed viscosity value (column 5, lines 40-44 and 53-56),

supplying the treated dampening solution having the aimed pH value and the aimed viscosity value to the offset printing machine (column 1, lines 27-29 and column 5, lines 53-62), and

further adding a viscosity increasing agent to the treated dampening solution to increase the viscosity to the aimed viscosity value when the treated dampening solution is increased in temperature, the temperature increase causing the viscosity to decrease below the aimed viscosity value (column 5, lines 53-62)."

Regarding claim 5, Bernstein discloses "an apparatus for supplying a dampening solution for an offset printing machine comprising a mixing tank for adjusting a dampening solution (column 5, lines 34-36), a viscosity measuring unit for measuring a viscosity of the dampening solution in the mixing tank (column 5, 40-45), an adding unit for selectively adding water and a surface active agent to the dampening solution in the mixing tank so as to obtain a treated dampening solution with an aimed viscosity value (column 5, lines 31-34 and column 6, lines 47-51), and a supply unit for supplying the treated dampening solution having the aimed viscosity value to the offset printing machine (column 5, lines 37-40),

Art Unit: 2854

wherein the adding unit further adds a viscosity increasing agent to the treated dampening solution to increase the viscosity to the aimed viscosity value when the treated dampening solution is increased in temperature, the temperature increase causing the viscosity to decrease below the aimed viscosity value (column 5, lines 53-62)."

Regarding claim 6, Bernstein discloses "an apparatus for supplying a dampening solution for an offset printing machine comprising: a mixing tank for adjusting a dampening solution (column 5, lines 34-36), a viscosity measuring unit for measuring a viscosity of the dampening solution in the mixing tank (column 5, 40-45), an adding unit for selectively adding, a surface active agent and viscosity increasing agent to the dampening solution in the mixing tank so as to obtain a treated dampening solution with an aimed viscosity value (column 5, lines 31-34 and column 6, lines 47-51), and a supply unit for supplying the treated dampening solution having the aimed viscosity value to the offset printing machine (column 5, lines 37-40),

wherein the adding unit further adds a viscosity increasing agent to the treated dampening solution to increase the viscosity to the aimed viscosity value when the treated dampening solution is increased in temperature, the temperature increase causing the viscosity to decrease below the aimed viscosity value (column 5, lines 53-62)."

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of MacPhee (US 5,713,282).

Claims 1, 2 and 3 have been addressed above.

Regarding claims 4, 11 and 12, Bernstein fails to specifically disclose that "the dampening solution is additionally supplied to the offset printing machine by an amount corresponding to a consumed amount thereof through a one-way manner." MacPhee discloses a dampening system that measures and controls the level of dampening fluid via a valve and one-way pipe (see claims 1 and 3, figures 11 and 12, specifically item 43 of figure 7). The dampening fluid supply and control means of MacPhee is provided in order to prevent fluid starvation at the nip (column 10, lines 43-47). Fluid starvation would directly result from the consumption of dampening fluid. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the fluid supply and control means of MacPhee in combination with the dampening system of Bernstein in order to prevent fluid starvation at the nip.

Art Unit: 2854

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of MacPhee (US 5,713,282).

Regarding claims 8 and 9, Bernstein discloses all that is claimed in claims 5 and 6, as discussed above. Bernstein fails to disclose "wherein the supply unit for supplying the dampening solution to the offset printing machine is provided with a one-way conduit connecting the mixing tank to a dampening fountain, a water-level meter for detecting water-level of the dampening solution in the dampening fountain, and a valve for additionally supplying the dampening solution to the dampening fountain by opening the one-way conduit in response to a signal form the water-level meter." MacPhee discloses a dampening system "wherein the supply unit for supplying the dampening solution to the offset printing machine is provided with a one-way conduit connecting the mixing tank to a dampening fountain (see specifically claims 1 and 3, figures 11 and 12, specifically item 43 of figure 7), a water-level meter for detecting water-level of the dampening solution in the dampening fountain (claim 3), and a valve for additionally supplying the dampening solution to the dampening fountain by opening the one-way conduit in response to a signal form the water-level meter such a fountain supply system (claim 3), wherein dampening solution is fed in one direction based upon a signal received from a level meter (claim 3). The dampening fluid supply and control means of MacPhee is provided in order to prevent fluid starvation at the nip (column 10, lines 43-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the

Art Unit: 2854

fluid supply and control means of MacPhee in combination with the dampening system of Bernstein in order to prevent fluid starvation at the nip.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of applicant's admitted prior art.

Regarding claim 7, Bernstein discloses "an apparatus for supplying a dampening solution for an offset printing machine comprising: a mixing tank for adjusting a dampening solution (column 5, lines 34-36), a viscosity measuring unit for measuring a viscosity of the dampening solution in the mixing tank (column 5, 40-45), an adding unit for selectively adding water, an etchant and a viscosity increasing agent to the dampening solution in the mixing tank so as to obtain a treated dampening solution with an aimed pH value and an aimed viscosity value (column 5, lines 31-34 and column 6, lines 47-51), and a supply unit for supplying the treated dampening solution having the aimed pH value and the aimed viscosity value to an offset printing machine (column 5, lines 37-40),

wherein the adding unit further adds a viscosity increasing agent to the treated dampening solution to increase the viscosity to the aimed viscosity value when the treated dampening solution is increased in temperature, the temperature increase causing the viscosity to decrease below the aimed viscosity value (column 5, lines 53-62)."

Bernstein does not specifically disclose "a pH concentration measuring unit for measuring pH value of the dampening solution in the mixing tank."

Bernstein does, however, imply the measurement and control of the pH, and

Art Unit: 2854

further teaches the ability to adjust the pH of the fountain solution to achieve an aimed pH (column 6, lines 29-32). Applicant's admitted prior art discloses an automatic adjusting apparatus which performs a pH adjustment, said apparatus including a pH detector (page 3, lines 10-19). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the pH detector of admitted prior art into the apparatus of Bernstein in order to control the pH of the dampening solution and achieve the desired pH value, as taught by Bernstein.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of applicant's admitted prior art, as applied to claim 7 above, further in view of MacPhee. Bernstein in view of admitted prior art does not disclose "wherein the supply unit for supplying the dampening solution to the offset printing machine is provided with a one-way conduit connecting the mixing tank to a dampening fountain, a water-level meter for detecting water-level of the dampening solution in the dampening fountain, and a valve for additionally supplying the dampening solution to the dampening fountain by opening the one-way conduit in response to a signal from the water-level meter." MacPhee discloses a dampening system "wherein the supply unit for supplying the dampening solution to the offset printing machine is provided with a one-way conduit connecting the mixing tank to a dampening fountain (see specifically claims 1 and 3, figures 11 and 12, specifically item 43 of figure 7), a water-level meter for detecting water-level of the dampening solution in the dampening fountain (claim 3), and a valve for additionally supplying the dampening solution to the dampening fountain by opening the one-way conduit in response to a

Art Unit: 2854

signal from the water-level meter such a fountain supply system (claim 3), wherein dampening solution is fed in one direction based upon a signal received from a level meter (claim 3). The dampening fluid supply and control means of MacPhee is provided in order to prevent fluid starvation at the nip (column 10, lines 43-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the fluid supply and control means of MacPhee in combination with the dampening system of Bernstein in view of admitted prior art in order to prevent fluid starvation at the nip.

7. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein.

Regarding claims 13-17, Bernstein teaches all that is claimed, but fails to specifically disclose that the aimed viscosity value is 1.3 poise. Bernstein does teach the desire to change the viscosity in order to improve press operations (column 5, lines 56-60). Moreover, the viscosity of the dampening solution is a results effective variable, affecting the amount of dampening solution on the printing plate. Therefore, it would have been obvious to one having ordinary skill in the art, through routine experimentation, to make the dampening solution wherein "the aimed viscosity value is at least 1.3 poise" in order to find the optimal value for press operations.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernstein in view of AAPA, as applied to claim 7 above.

Regarding claim 18, Bernstein in view of AAPA teaches all that is claimed, but fails to specifically disclose that the aimed viscosity value is 1.3 poise.

Art Unit: 2854

Bernstein in view of AAPA does teach the desire to change the viscosity in order to improve press operations (column 5, lines 56-60). Moreover, the viscosity of the dampening solution is a results effective variable, affecting the amount of dampening solution on the printing plate. Therefore, it would have been obvious to one having ordinary skill in the art, through routine experimentation, to make the dampening solution wherein "the aimed viscosity value is at least 1.3 poise" in order to find the optimal value for press operations.

Response to Arguments

9. Applicant's arguments filed 08/04/2006 have been fully considered but they are not persuasive. The references still read on the new limitations as outlined in the above rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

Art Unit: 2854

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Zimmerman whose telephone number is 571-272-2749. The examiner can normally be reached on M-R 8:30A - 6:00P, Alternate Fridays 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdz

Joshua D Zimmerman
Examiner
Art Unit 2854


REN YAN
PRIMARY EXAMINER